UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,942	12/11/2000	Terue Watanabe	JP919990219US1	5167

7590 09/15/2003

James B. Murray
69 South Gate Drive
Poughkeepsie, NY 12601

EXAMINER
YANG, RYAN R

ART UNIT	PAPER NUMBER
2672	5

DATE MAILED: 09/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/733,942	WATANABE, TERUE	
	Examiner	Art Unit	
	Ryan R Yang	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-12 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-12 are pending in this application. Claims 1, 5 and 9 are independent claims. This action in non-final.

2. This application claims foreign priority dated 12/28/99.

3. The present title of the invention is "Method of displaying magnified and reduced areas and apparatus thereof".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 4-6, 8-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Niles et al. (5,943,679).

As per claim 1, Niles et al., hereinafter Niles, discloses a method of displaying magnified or reduced areas of a diagram, comprising the steps of:

storing diagram linkage information as to how other portions of a diagram are affected when a certain portion of a diagram is magnified or reduced (Figure 1 23 is the memory, Figure 1 18 Document Display Manager arranges the document and Figure 1 12 Bitmap Image Generator generates the document; "The focus page p(i) is displayed at the maximum or near the maximum resolution possible for a particular display

screen 32", column 7, line 10-12 and "These pages p(i-1) and p(i+1) are displayed at one half the resolution (or one half the size in the case of bit halving) of focus page p(i)", column 6, line 65-67, where a page is considered a portion of a diagram).

magnifying or reducing the certain portion of the diagram with a designated magnification or reduction ratio ("The focus page p(i) is displayed at the maximum or near the maximum resolution possible for a particular display screen 32", column 7, line 10-12 and "These pages p(i-1) and p(i+1) are displayed at one half the resolution (or one half the size in the case of bit halving) of focus page p(i)", column 6, line 65-67);

magnifying/reducing the other portions of the diagram other than the magnified or reduced portion of the diagram in accordance with the diagram linkage information (Figure 3 52 where the subsequently linked pages has further reduced images);

obtaining display specification information characterizing the magnification or reduction ratio of each portion of the diagram (Figure 5 102); and

displaying each portion of the diagram based on the display specification information characterizing each portion magnification or reduction ratio so that the portions of the diagram are characterized differently depending on their magnification or reduction ratio in the display (Figure 5 108 where the calculated page layout is the display specification and Figure 3 is an example of the display).

6. As per claim 2, Niles demonstrated all the elements as applied to the rejection of independent claim 1, supra, and further discloses the step of displaying each portion of the diagram includes the step of displaying a scale indicating a size of the diagram as

well as each of the portion of the diagram (Since in column 6, line 50-51 Niles discloses "a layout that will accurately display the pages of a document on display screen 32" the displayed page itself is inherently a scale indicating a size relating to other pages).

7. As per claim 4, Niles demonstrated all the elements as applied to the rejection of independent claim 1, supra, and further discloses a pattern density of a portion of the diagram is changed in correspondence to the magnification or reduction ratio of that portion ("a change in resolution is equivalent to a change in size", column 7, line 1).

8. As per claim 5, Niles discloses an apparatus for displaying magnified or reduced area, comprising:

means for storing diagram linkage information as to how other portions of a diagram are affected when a certain portion of a diagram is magnified or reduced (Figure 1 23 is the memory, Figure 1 18 Document Display Manager arranges the document and Figure 1 12 Bitmap Image Generator generates the document; "The focus page p(i) is displayed at the maximum or near the maximum resolution possible for a particular display screen 32", column 7, line 10-12 and "These pages p(i-1) and p(i+1) are displayed at one half the resolution (or one half the size in the case of bit halving) of focus page p(i)", column 6, line 65-67, where a page is considered a portion of a diagram);

means for magnifying or reducing the certain portion of the diagram with a designated magnification or reduction ratio ("The focus page p(i) is displayed at the maximum or near the maximum resolution possible for a particular display screen 32",

column 7, line 10-12 and "These pages p(i-1) and p(i+1) are displayed at one half the resolution (or one half the size in the case of bit halving) of focus page p(i)", column 6, line 65-67);

means for magnifying or reducing the other portions of the diagram other than the magnified or reduced portion of the diagram in accordance with the diagram linkage information (Figure 3 52 where the subsequently linked pages has more reduced images);

means for obtaining the display specification information corresponding to the means for displaying each portion of the diagram based on the display specification information characterizing to each portion magnification or reduction ratio so that the portions of the diagram are characterized differently depending on their magnification or reduction in the display (Figure 5 108 and Figure 3 is an example of the display).

Regarding the "means plus function" language, the means refer to the software methods executed on generically disclosed hardware explicitly disclosed by Niles. It is further noted that both software and hardware means are functionally equivalent.

9. As per dependent claim 6, this is directed to an apparatus for performing the method of dependent claim 2, and therefore is identically rejected to dependent claim 2.

10. As per dependent claim 8, this is directed to an apparatus for performing the method of dependent claim 4, and therefore is identically rejected to dependent claim 4.

11. As per claim 9, Niles discloses a computer program (Figure 1 10) on a computer-readable recording medium for displaying magnified or reduced areas of a diagram, wherein the program comprises:

software for diagram linkage information indicating how other portions of a diagram are affected when a certain portion of the diagram is magnified or reduced (Figure 1 23 is the memory, Figure 1 18 Document Display Manager arranges the document and Figure 1 12 Bitmap Image Generator generates the document; "The focus page p(i) is displayed at the maximum or near the maximum resolution possible for a particular display screen 32", column 7, line 10-12 and "These pages p(i-1) and p(i+1) are displayed at one half the resolution (or one half the size in the case of bit halving) of focus page p(i)", column 6, line 65-67, where a page is considered a portion of a diagram);

software for magnifying or reducing the certain portion of the diagram with a designated magnification or reduction ratio ("The focus page p(i) is displayed at the maximum or near the maximum resolution possible for a particular display screen 32", column 7, line 10-12 and "These pages p(i-1) and p(i+1) are displayed at one half the resolution (or one half the size in the case of bit halving) of focus page p(i)", column 6, line 65-67);

software for magnifying/reducing the portions of the diagram other than the magnified or reduced portion of the diagram in accordance with the diagram linkage information (Figure 3 52 where the subsequently linked pages has further reduced images);

software for obtaining the display specification information characterizing the magnification or reduction ratio of each of the portions of the diagram (Figure 5 102); and

displaying each of the portions of the diagram in accordance with the display specification information characterizing each magnification or reduction ratio so that the portions of the diagram are characterized differently depending on their magnification or reduction ratio in the display (Figure 5 108 where the calculated page layout is the display specification and Figure 3 is an example of the display).

12. As per claim 10, since Niles discloses the software program (Figure 1 10) to perform the claimed limitation, the claim is similarly rejected as claim 2.

13. As per claim 12, since Niles discloses the software program (Figure 1 10) to perform the claimed limitation, the claim is similarly rejected as claim 4.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 3, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niles as applied to claim1 above, and further in view of Sakuma et al. (5,323,173).

As per claim 3, Niles demonstrated all the elements as applied to the rejection of independent claim 1, supra.

Niles discloses a method of displaying images with varying resolutions. It is noted that Niles does not explicitly disclose "a shade of color of a portion of the diagram is

changed in correspondence to the magnification or reduction ratio of that portion", however, this is known in the art as taught by Sakuma et al., hereinafter Sakuma. Sakuma discloses a method of displaying image in which color is changes in according with changing scale factor (column 10, line 46-47).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sakuma into Niles because Niles discloses a method of displaying images with varying resolution and Sakuma discloses the color of the image of changed resolution can be changed accordingly in order to easily discern the changes in image resolution.

16. As per dependent claim 7, this is directed to an apparatus for performing the method of dependent claim 3, and therefore is identically rejected to dependent claim 3.

17. As per claim 11, since Niles discloses the software program (Figure 1 10) to perform the claimed limitation, the claim is similarly rejected as claim 3.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Inquiries

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ryan Yang** whose telephone number is **(703) 308-6133**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Razavi**, can be reached at **(703) 305-4713**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ryan Yang

Ryan Yang

August 30, 2003